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THE BASIS OF AN EFFECTIVE EDUCATION—CULTURE OR VOCATION¹

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The writer presents this paper with some diffidence; because the subject is largely of a technical character appealing with particular interest to experts, who have become versed in the wide field of education by special pedagogic training, peculiar facilities for acquiring expert educational knowledge, or long experience in teaching. The writer lays claim to none of these qualifications. Occasionally, however, the views of a non-expert on a subject may be of service to experts, by reason of accidental conditions of view-point that are not likely to be occupied by those who work in the midst of a certain stage; but which may happen to be offered to spectators in the gallery. Moreover, in so far as the subject is not wholly of an expert character, but appeals to the consideration of teachers in general, or of citizens at large, it admits of being dealt with in non-expert fashion.

Much difference of opinion exists as to the meaning of the terms "education," "effective education," "culture," and "vocation." These terms are used in different ways even by experts. Since there can be little hope of reaching either useful agreements, or useful disagreements, unless some provisional basis of formulating discussion is provided, a few preliminary definitions of these terms may be first considered. These definitions may neither be correct, from an expert standpoint, nor even generally acceptable; but at least they may serve as the temporary foundation for a thesis.

In the broadest sense of the term, education may be admitted to mean the training of the faculties, or any of them, for any assigned purpose or purposes. The faculties considered cannot

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be limited to mental faculties, but must properly include physical, moral, and emotional faculties—i. e., all faculties. We can judge of the training of the faculties, in ourselves or in others, only from the standpoint of some particular purpose or purposes. A training of the faculties which may make a man into a splendid dispenser of truth, behind the counter of a railroad-station information bureau, might be very inadequate for the dispenser of lubricant, who works in the locomotive roundhouse of the same railroad station, preparing the hungry and thirsty engines for their daily toil. Purpose is as necessary to the determination of education, as education to the determination of purpose.

The most general and fundamental of all human purposes is the maintenance of existence, and, in the broadest sense, everyone who lives has become educated from the standpoint of the elementary physiological faculties, and this general purpose. The mere maintenance of healthy existence involves the education of the subconscious vital centers, by long and patient training. Premature death of the individual is the penalty attached to failure of his lower brain to learn its lessons within the allotted season. In view of unhygienic environment, or of defective heredity, how much harder are the problems which some young brains have to solve, under penalty of dissolution, than those presented to healthy children reared among healthy surroundings!

In the dark long ages of the individual and disunited struggle for existence, animals, and especially human beings, have become educated by the school of necessity for the purpose of surviving, and have, under that education, developed various activities and propensities. The sense of smell, for instance, has become highly trained in hunting-dogs. From a consideration of olfactory sensibility alone, for the purpose of detecting and pursuing prey, a well-trained fox-hound or setter is much more highly educated than any ordinary human being. If the dog's mental faculties were as much more developed than man's as are his smelling faculties, we might expect the places of dog and man to be mutually reversed in the conduct of our lives.

If we accompany an aboriginal Indian through some remote forest, we are constantly reminded of his wonderfully trained

powers of observation and judgment concerning the wild and woodland environment where he does business in the manner so minutely described by James Fenimore Cooper. His senses are wonderfully keen, as are likewise his simple sense-memories. His muscular co-ordinations have also been marvelously trained for his particular mode of securing a livelihood. From a consideration of these particular qualities only, and with reference to this particular purpose, the wild Indian is a highly educated man; although from other considerations, and for any superior purposes, we might be compelled to describe him as a savage.

Proceeding in the direction of increasing mental activity and complexity, we may descend a coal-mine and visit a coal-miner working at his avocation in a deep seam. He may never have learned to read, and yet his skill and judgment in the work of drawing coal from its long sleep in the lap of earth, and bringing it up to the light of its parent sunshine, seem to us wonderful. Such a man, judged from the standpoint of this particular art alone, and for this exclusive purpose, is highly educated; although from other standpoints, and for other purposes, he may appear very uneducated.

Nevertheless, it is customary to speak of education in the unnecessarily limited sense of training the intellectual and moral faculties for the general purposes of human life, and especially for the intellectual and moral purposes. This limitation of the definition is justifiable in the sense that all that is greatest and most noble in man is found associated with mental and moral attainments. As the idea has been expressed by one well-known writer: "In the world there is nothing great but man, and in man nothing great but mind." The great leaders of men are generally of large intellectual caliber and achievement. A few such men modify the lives of their contemporaries, by deed, or by inspiration, more profoundly than many generations of less gifted folk. The greatest men of the world have manifested their superior powers in a vast variety of ways, such as in art, commerce, literature, production, science, statesmanship, and war. In view of the enormous benefit that these men have contributed to the progress of the race in these various ways, and of the enor-

mous importance of stimulating successors to their tasks, we seek to open the channels of mental development along all of these lines, so that young people may be trained for such purposes. We try to discover what are the mental qualities that make men distinguished along any particular line, and also to discover what process of mental training may best be followed by each individual young person, in order to secure as far as possible the best results. We are forced to admit that great mental, physical, or moral aptitudes are inherited, rather than acquired; but we also recognize that training is capable of developing, in a marked degree, whatever aptitude each individual may possess.

The purposes which determine the value of an education are the purposes which one lives for, or that one should be properly regarded as living for. An education is efficient which, when judged from the standpoint of the particular duties falling to the individual, enables those duties to be fulfilled effectively and satisfactorily for the purposes with which the individual is properly to be credited in the conduct of life. The proper purposes of life are estimated differently from age to age, according to the prevailing philosophy of the time; so that the most efficient education that we can conceive of today might be estimated as inefficient at some later date, when the purposes for which we live shall have undergone popular revision. Nevertheless, it will be generally admitted in this our age that a human being owes two duties to life. One is toward himself, and is that he shall seek enjoyment in living. The second duty is toward his fellows, and is that he shall seek to make living enjoyable to them. The first duty is personal, and the second altruistic. The greater the clashing and interference between these two oppositely directed duties, the less efficient a member of society the individual is likely to become, and also the less contentment and happiness he is likely, in the long run, to secure. On the other hand, the more nearly these two oppositely directed groups of duties can be harmonized, so as not to interfere with each other, the greater the probable efficiency and ultimate happiness of the individual, both as a unit and as a member of society. The only way in which the two duties can be simultaneously conducted without

interference is by training the mind to enjoy indirectly the doing of certain useful things directly for others, and also to regulate personal enjoyment so as not to enjoy what is detrimental to others; but, on the contrary, to make direct personal enjoyment contribute indirectly to the enjoyment of others. The training which leads to the performance of duties for others is essentially vocational training, and the training which leads to the performance of duties to oneself is essentially cultural training.

In its primitive form, vocation is the duty of life to others, whereby living is made happier for them, and culture is the duty of life to oneself, whereby living is made happier for the individual. In an early stage of training the two duties are readily defined and separated. It is sufficient, in an early stage of development, that the individual be trained to perform some duties or business for others, whether he enjoys the performance or not, and also that, consistently with those duties, he shall enjoy himself in any manner that shall not give offense to others. But in higher stages of vocational and cultural training the two duties and states of action blend and merge. The training to vocational duties brings pleasure to the individual; so that he enjoys his work. At the same time, the training to cultural duties causes him to seek beauty in all that he examines, in order to enjoy the beauty perceived, and to find sympathy with some quality in every life, in order to rejoice in the sympathy discovered. Consequently, in a highly trained individual, culture and vocation, instead of being alternately and oppositely evidenced, becomes so closely associated and codirected that vocation is alike the duty of life to others and a necessity for enjoyment; while culture is that duty of life to oneself whereby the highest and noblest aims are sought, the beautiful and the true recognized, and the best and worthiest deeds performed. In this association the individual's vocation or external activity becomes permeated with the essence of his culture, and his culture, or internal activity, becomes enriched with the fruits of his vocation. The highest vocational and cultural development is purely ideal; for it would call not only for a state of civilization higher than

that in which we now live, but also for an indefinitely highly developed intelligence. A person of the highest vocational and cultural development would have to enjoy complete physical health. He or she would possess almost supernatural intelligence and perception; would take the keenest delight in everything seen or everything undertaken; would find sympathy with everything that lives, or finds expression; would take delight in the business as well as in the amenities of life; would always act promptly, intelligently, sympathetically, earnestly, fearlessly, devotedly, and in a business-like way. No such ideally perfect being perhaps exists; but cultural and vocational training aims jointly to produce such qualities, and according to the measure in which we find such qualities attained do we estimate the culture and vocation of ourselves and of each other.

Having provisionally offered, as above, definitions of the principal terms in this discussion, we may next consider what training may be expected to produce the most efficient education. No single and definite answer can be given to this question, on account of the infinite number of types of individuals to be trained, and also of the enormous number of vocations that the world requires and provides. The answer to the question depends upon the particular individual to be trained, and also upon the vocation which he will take up. A training which might be very efficient in the case of the young American who becomes a sailor, for example, might be much less efficient in the case of a similar pupil who becomes a salesman. Up to a certain point we may all agree that the two trainings may advantageously be identical. We may also admit that in particular types of pupil if one and the same training were followed for both vocations, the youth would be enabled to do well either as a sailor or as a salesman. Nevertheless, most persons will agree that the best training for the average type of pupil should be differentiated after a certain period. The boy whose vocation is to be at sea should finally be trained most efficiently in one manner, and the boy whose vocation is to be in the business of distribution should finally be trained most efficiently in another manner. It is a fairly common belief that the differentiated final portion of the training

which fits each pupil for his special vocation is entirely vocational, and that the earlier general training of the undifferentiated type is entirely cultural. This may be a convenient classification for descriptive purposes; but logically and practically it is a classification that cannot be maintained.

The elementary training in reading, writing, and arithmetic which forms the basis of primary-school education in all civilized countries, is properly regarded as cultural training, because training in these subjects underlies the training in all the more advanced cultural training. Nevertheless, in the earlier history of European civilization, and in the present development of Asiatic civilization, these subjects are vocational. In some parts of Asia today a pupil learns reading in order to be a professional reader, writing in order to be a professional scribe, or arithmetic in order to be a professional accountant. Surely it would not be fair to say that the cultural training in reading, writing, or arithmetic is necessarily either forfeited or restricted in the case of such pupils as may receive instruction in these subjects merely for a vocational training. Nor is it necessary to carry our thoughts to Asia, in order to confront the same question in modern everyday life. The arts of reading and of writing are essential to practically all of the vocations which exist in modern civilized society. Consequently, training in reading and writing may properly be regarded as vocational training, in the sense that these arts are necessary elements in practically every vocation. Again, arithmetic is stated in the official register of the Scranton International Correspondence Schools as being a course taken by 96 per cent. of all the pupils at the beginning of their instruction in that institution. The instruction which they receive is essentially vocational, in view of its purpose to fit pupils for various businesses. The school and the pupils manifestly regard arithmetic as a subject of commanding importance in the training offered and followed. Can it be maintained that arithmetic which is learned for vocational purposes is necessarily deprived of the cultural effects which we all recognize that it possesses when learned in the ordinary school?

There are some who say, however, that the subjects of read-

ing, writing, and arithmetic may not properly be divided into cultural or vocational classes, because these are so fundamental and so elementary. They say that the differentiation of subjects into cultural or vocational classes necessarily and properly exists in more advanced studies. In response to this contention, it may be conceded that the general influence of a training in certain particular studies may be more vocational than cultural; while in other particular studies the general influence of the training may be more cultural than vocational. These respective tendencies are, however, not to be attributed to the particular subject but to the manner in which the subject is studied, as well as the purpose for which it is taught. In other words, whether a pupil gains more training in his duties to others, or in his duties to himself, in the study of a given subject, does not depend on the nature of the subject, but depends on the mental attitudes of the teacher and pupil with respect to the subject; that is, upon the purpose for which it is taught, and the purpose with which it is acquired and utilized. If the subject is taught and learned for vocational purposes, the effect of the training will probably be vocational mainly and directly; but cultural also indirectly and subsidiarily. If, on the contrary, the subject is taught and learned for cultural purposes, then the effect of the training will probably be cultural, mainly and directly, but vocational also indirectly and in lesser degree.

As an illustration of the above proposition, let us take the subject of osteology, as a subdivision of anatomy, which is usually regarded as an eminently vocational study. If studied as mere osseous topography, by a student of surgery, for the purpose of becoming accurately acquainted with the organization of the human skeleton, its effect as a training may be mainly vocational. But if osteology be studied by an art-student for general culture, and in order to appreciate and enjoy figure-painting; or if it be studied by one who is interested in geology as a general culture, and for the purpose of understanding and enjoying the science of fossil analysis, the effects of the training in osteology may be mainly cultural. Moreover, if the pupil who took osteology as a vocational study, in order to train as a surgeon, later changed his

business to art or to geology, the effect of his training in the subject would still be mainly vocational; but if he changed it, say, to something in which anatomy can play only a very subdued part, as, for example, the business of fire insurance or piano-tuning, the effect of the training in anatomy would be mainly limited to its cultural effect. No one who considers the manifold and important relations of anatomy to the arts, sciences, and amenities of life can doubt its capability for cultural effect if studied for such a purpose.

On the other hand, let us consider, as another example, some branch of classical literature, say the study of the writings of the great poet Homer. Such a study is usually regarded as eminently cultural. We must all admit that, if Homer be studied and taught in the original Greek, for the sake of the training in memorizing beautiful language, in appreciating fine poetry, graceful expression, artistic rendering of historical events, and sympathetic portrayal of human emotion, the principal effect of the training will be cultural. In so far, however, as a graceful and forceful literary style in writing English may be needed in any intellectual vocation, the training in the Greek writings of Homer may be incidentally vocational. Moreover, if a student, in order to comply with the requirements of a certain vocational training, has to pass an examination in Greek literature, his study of that subject may be partly vocational. Finally, if he studies Homer in order to become a teacher of Greek literature, whatever cultural effect he may derive from the training, the effect of the training will be essentially vocational.

In the same manner, we might consider, in turn, each and all of the subjects which form the medium and support of mental intercourse between teacher and pupil. In every case the subject studied is in itself neither vocational nor cultural, except in relation to the mental attitudes and purposes of the two minds engaged on it. If it is taught and learned essentially as a training of the individual in his duties toward himself, the essential results of that training will probably be cultural. If it is taught and learned as a training in his duties toward his fellows in

his life's business, the essential results of the training will probably be vocational.

As a corollary to the above proposition, it may be asserted that no educational subject is of greater magnitude, interest, importance, or prominence than another, except in reference to some particular purpose or purposes. In other words, all subjects are equally great, noble, or important, as they exist in nature, and aside from human needs or demands. This is but another way of saying that the material universe and the world of consciousness are each infinite, and any part or aspect of them must therefore be limitless, if no artificial barrier is inserted to cut the part off from association with its surroundings. All truth must be infinitely one and the same, as our minds conceive of it, no matter from what direction we approach it. If subjects are defined in so limited and narrow a fashion as to prevent the mind from traveling in them, it is conceivable that one might be regarded as larger or worthier than another; but unless so artificially restricted, the limits of a subject are only determined by the limits of the intelligence that envisages it.

As soon as we take into consideration the aims and purposes of individuals, subjects align themselves in the order of relative importance. Each business or vocation has its special group of important subjects. From a vocational standpoint, subjects and studies have very different values. A school which specially prepares pupils for a certain vocation necessarily selects the particular subjects that it deems most important for that vocation. Vocational schools in this sense must perforce be somewhat narrow and one-sided. Thus a textile school, a musical school, and a school of pharmacy must be special and limited in their training, if they are to be vocationally successful. Just as economy appears in nature to be limited to the processes of organic life, and economy exists but for living purposes; so the selection of subjects for vocational training, which is but a particular manifestation of economy, finds its necessity for living purposes alone. On the other hand, there is no subject which is valueless for cultural training. Any subject, when suitably taught and suitably learned, may be made to contribute to the training of an

individual in the duties he owes to himself; or may become a cultural subject. A vocational subject may be used also for its cultural effect; but a cultural subject may have to be excluded, by reason of the necessity of selecting vocational subjects, at a certain period of schooling.

In order to recognize the cultural value of essentially vocational subjects, we need only observe that the most eminently cultural subject is the vocation of a certain section of the community. If we take the treasures of a picture gallery, with its abundant suggestions of beauty and sympathy, these pictures are the vocational study of artists. It cannot be maintained that pictures exert a cultural effect only upon those who do not produce them. It is evident that a great picture cannot be produced by an artist unless its cultural influence lay in the artist's soul. "If the Lord has not first given it to him, he cannot give it to us."

If we visit a great exhibition, we are conscious of the strongly cultural influence of its artistic and scientific collections. Each of the objects exhibited has been someone's vocation to produce. We cannot arrogate to ourselves the belief that the cultural influence of each object was denied to its producer.

Not only may a vocational subject serve for cultural training; but cultural influences may be considerably extended for each individual, through the medium of his vocational training. In fact, many individuals seem to be dependent largely upon their business for cultural influences. The more we know about any particular object, the more readily we are able to detect its salient features, to be interested in it, and to respond to it intellectually, so as to recognize its beauties. A striking evidence of this is presented by visits to successive international exhibitions. Those of us who spent, say a week, at both the Chicago World's Fair of 1893 and the St. Louis World's Fair of 1904 will probably remember that a marked advance was manifested by the latter exhibition, in those directions of art or of industry with which we are each identified vocationally. In our own particular vocational lines, we observed with interest and keen delight that eleven years had brought about a very notable advance and

development. In matters with which we had a lesser degree of acquaintance, it probably seemed as though there had been less change; while in matters of which we were ignorant, it seemed as though there had been no change or improvement whatever. Nevertheless, when we happened to meet a specialist in some subject of which we were ignorant, we probably found that he was enthusiastic upon the great change and development that had occurred in the line where we could recognize no change; whereas he was silent and doubtful as to whether any improvement could be vouched for among the objects within our own vocational acquaintance. In such cases it is evident that the degree of cultural influence depends upon the limits of vocational training.

Seeing, then, that cultural influence is to be derived from vocational training, how early in the training of the individual should vocational training commence? How much of his training should be generally cultural, and when should this give place to vocational training? The answers to these questions will depend upon the conditions of each case, with respect to aptitude, vocational inclination, and economic necessity. For any given pupil each teacher will have his own views, as modified by his philosophy, as to the nature and functions of mental training.

It is generally recognized that education should conform to the dictates of physiology and of psychology. As soon as we shall have arrived at a clear understanding of what physiology and psychology dictate, in regard to the education of the young, we shall all be able to agree upon a proper and scientific way of conducting education. Meanwhile we take the best course that we can in view of experience through many generations, aided by such results as physiology and psychology have already made plain.

Most of us will admit that muscular development should precede mental development in its early stages. The child should have ample opportunity to develop the motor areas of its brain by the muscular action which the child calls "play," and which it so greatly enjoys. The mental development, assisted by educa-

tion, is built later upon the basis of the motor development in the brain areas.

The mental training of education is perhaps capable of effecting three different stages of result, each of which may be recognized subjectively, and may be imagined objectively. The first effect is in the direction of mental concentration, or the training of the body of the brain. The second effect is the development of memories and the retention of concepts, or the training of the mind. The third effect is the development of the interconnection between ideas, and the formation of compound ideas; or the training of the soul. All of this analysis is more or less of a speculative character, and may invoke much dissent. If, however, the speculation can be made to serve a useful purpose, and does not set itself in opposition to facts, it may be provisionally entertained.

We may suppose that the first effect, or the effect inducing mental concentration, may be accompanied by a partial voluntary control of the circulation in the brain; whereby certain areas may be physiologically congested at will, and other areas temporarily deprived of activity. Under the influence of mental training, it becomes possible to concentrate attention upon a subject, to the partial or complete exclusion of other subjects. This greatly increases the powers of the mind. Concentration of thought is more readily acquired by some pupils than by others. By some it is learned at a relatively early age; while others never acquire it, to any appreciable extent. Concentration is a characteristic of all active brain-workers, and perhaps it is correct to say that all individuals of great mental power manifest this characteristic in a marked degree.

We may suppose that the second effect, or memory-training, consists in storing up impressions in the brain centers—perhaps the fibers of brain-cells—in such a manner that these impressions may be recalled at will. It is these available memories of impressions which constitute mental wealth. Upon this stock we have to rely for our inferences and judgments. The nature of the stock, the assortment of the memories, will depend upon the life that has been led, upon the environment of the individual,

and upon the nature of the subjects to which his attention has been closely directed. The process of memory storage we know to be continuous throughout the healthy life of the brain. Nevertheless, it is doubtful whether after a certain epoch usually occurring in adult life, it is possible to accumulate new memories, without obliterating old ones to make room. Prior to this epoch, the brain may be considered as a fresh page for the reception of impressions, but after this epoch only as a palimpsest. It is reasonable to suppose, however, that early training may not only store memories effectually, but also enlarge the storehouse; so that the number of memories that an individual is able to accumulate through life may be increased by mental training in school days.

We may suppose that the third effect, or the development of interconnection between ideas, consists in developing suitable interlinking or interweaving of brain-cell fibers. We may picture to ourselves that, as the fibers grow and ramify, they will come into contact, and unite in such a manner that the activity of one will convey a stimulus to the other. Casual unions of this sort, which result in harmonious sympathetic reaction, will become permanent; while those that are useless, or dissonant, will atrophy and cease. We tread here on very dangerous ground, so far as concerns scientific support and foundation. The true physiological picture of the building-up of association among ideas may be very different; but, unless the picture here outlined is grossly misleading, it may serve provisionally as a diagrammatic sketch. We may assume that a principal effect of cultural training is to bring about an abundant interweaving of brain-fibers, whereby any active impression awakes a sympathetic association of impressions in outlying mental areas. Consciousness of sympathy, and recognition of beauty, are thus evoked by all normal suggestions. It becomes impossible normally to excite the highly cultured mind without arousing sentiments of beauty, interest, happiness, and sympathy.

This effect of cultural training should be fostered by all influences that awaken harmonious and noble association of ideas, so as to stimulate the union of appropriate juxtaposed brain-fibers, while tending to kill by disuse all casual unsuitable

blendings. Each time a mental stimulus runs across a certain union, that union may be regarded as strengthened for future communication; while every time we succeed in arresting a train of thought across a junction, we tend to make that junction more difficult, to obscure and obliterate it. We must expect a highly organized intellectual meshwork to be largely an inherited characteristic. Souls, as well as minds and bodies, are communicated from parents to children; yet training of the soul should be as effective in developing it as the training of the body or of the mind.

A highly developed interconnection system of brain-centers would seem likely to require a highly developed system of individual brain-centers as a basis. In other words, a large stock of impression memories is essential to a potent system of associations of ideas. The memories may be of any kind, and may have been developed either by cultural or by vocational training; but for the best association system they should perhaps be multiform; that is to say, the stock of memories should be as varied as possible, in order to produce the richest blending capacity.

If the above propositions meet with even partial assent, we shall probably agree that school education is directed to producing all three above-mentioned effects, or the training of the brain-body, the mind, and the soul. There is no subject taught which does not permit of training the brain-body, or mental concentration, at least in some degree. There is no subject which can be taught which does not train the mind by exercising memory, in some direction or directions. There is no subject taught, which, rightly apprehended, is incapable of training the soul, at least in some measure. The number of subjects must however, be limited, because teachers are limited in number, school days are few, and life is short.

Theoretically, if all pupils had the same inherited capacity for training, the same measure of mental health and strength, similar inclinations, and similar means of support, each and all should be educated through all school stages commencing with the kindergarten and ending with a college and a vocational school. If all persons were capable of equally high training,

there would be no reasons why the lowest and least responsible duties for the community should not be undertaken by highly educated men and women. On the contrary, there are abundant reasons why they should. The better educated the person who fills a menial position, the more efficiently will the work be done. As a well-known prison governor once remarked: "It takes brains and training to make a properly conducted convict."

We know, however, that the inherited capacity of different individuals for mental training differs enormously. At one end of the range we have pupils with genius like that of Gladstone and a host of compeers. At the other end of the range we have the feeble-minded and paretics. The average of a thousand, or better still of a hundred thousand, pupils, drawn from the same community, is the only reliable entity to depend upon conjecturally. The average duration of the school period, in the whole United States, is estimated at present at about six years. There can be no doubt that many thousands leave school early for the duties of life, because of economic family difficulties, and some because their training has been ineffective. If we excluded those who leave because of economic necessity, and those who have missed the aim of mental training, it may be safe to say that the remainder drop out of school when school ceases to train them further according to their own estimate. The cup of one pupil's capacity will run over in four years of training; while that of another will hold and utilize the measure of twenty years' diligence in study.

In view of these elemental facts, it is idle to hope for any uniform system of cultural training, leaving aside the necessary diversities of vocational training. We can only hope for a system of general education so flexible and extensive that each pupil's case can be fairly provided for.

We want each individual to go out into life prepared to commence its duties. This means in modern life the acquisition of at least the elements of a vocational training. We want first a general training for culture, and also for a basis of vocational training, and then we want the vocational training at the close of the school training. If pupils cannot select a vocation, then they must

either be directed by their friends to choose a vocation, or they must finish out their education so far as it goes in general subjects, and leave their vocational training to business life. In some cases, and with some persons, this is no great loss, or detriment to subsequent utility and effective vocation. In other cases, and with other persons, it is a serious drawback, and produces serious discouragement. In general, it would seem desirable that the last quarter of each pupil's schooling should be in a vocational school. Thus, if a pupil commences school at the age of six and ends at eighteen, the last three years might be in some vocational school. This question of relative duration of training in vocational schools or non-vocational schools must, however, be a matter of personal opinion and personal judgment. There can, of course, be no rigid rule.

We need every kind of school—the day school, night school, correspondence school, kindergarten, primary school, grammar school, Latin school, high school, normal school, manual-training school, art school, technical school, secondary school, special school, college, professional school, and graduate school. We want more vocational schools of different types, and as many as will, in the broad sense of the community, pay for and justify their creation. Each type has its own value and share of work to do. Moreover, we want to hold out a hand of sympathy and help to the vocational schools, because they are all comparatively juvenile, and have grown out of the industrial needs and demands of the last hundred years. We do not need to be told that non-vocational schools of the classic type can train good citizens. Experience over many decades assures us of this fact. But we need time to demonstrate fully, what we believe, that equally good and valuable citizens can be trained in the vocational schools or industrial schools. It is only reasonable that the rapidly increasing complexity and specialization of industrial life should call for corresponding complexity and specialization in its preparatory training.

Finally, we ought to hold out the hand of encouragement and welcome to such pupils as may desire to pursue a longer and higher educational training after having taken a vocational train-

ing. The lad who has trained at the business school or the manual-training school ought not to be deprived thereby of the opportunity of going to college, if he should so desire. Ordinarily, the vocational training should come at last, and the higher the final training, the broader and deeper should be the foundations; but in cases where young people have taken training in vocational schools, the faithful performance of their work should open and not close the door to the college, if they should change their minds and seek further instruction. It is not so much the kind of work that we do, but rather the satisfactory accomplishment of it, that is our title to recognition and encouragement.